## ABSTRACT OF THE DISCLOSURE

A system may include an instruction cache, a trace cache including a plurality of trace cache entries, and a trace generator coupled to the instruction cache and the trace cache. The trace generator may be configured to receive a group of instructions output by the instruction cache for storage in one of the plurality of trace cache entries. The trace generator may be configured to detect an exceptional instruction within the group of instructions and to prevent the exceptional instruction from being stored in a same one of the plurality of trace cache entries as any non-exceptional instruction.

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